

The LSU Superfund Research Center Presents:
**A Community-Engaged
WEBINAR SERIES**

**Community Engagement
& Environmental Health
in Louisiana**

February 9, 2021

Moderated by Jennifer Irving

LSU | Superfund Research Center



Wilma Subra



**Jennifer Abraham
Cramer**

This event is sponsored by a grant from the National Institute of
Environmental Health Sciences (P42-ES013648)

Good afternoon to everyone. Thank you for joining us. We still have a few people logging in so we're going to wait a few minutes and then we'll get underway.

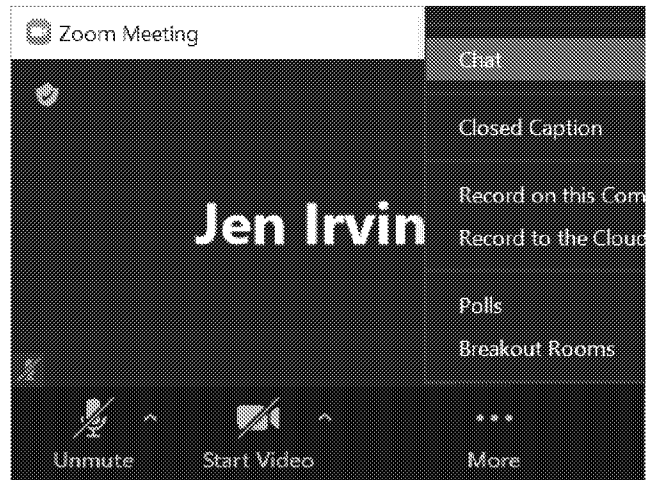
Okay, I think we are ready to go. Thank you for joining us for today's webinar, "Community Engagement and Environmental Health in Louisiana".

Today's webinar is sponsored by the LSU Superfund Research Center and the National Institute of Environmental Health Sciences Superfund Research Program

Before I introduce our speakers, I would like to cover a few housekeeping topics.

Housekeeping

- Today's webinar will be recorded
- Microphones have been muted
- Submit questions for the speakers to the host (Jen Irvin) through the chat box
- Other questions about the webinar may be addressed to any of the other co-hosts



Today's webinar is being recorded. We will share a link with you after the event is complete. We welcome you to revisit the content yourself and share it with colleagues.

To help make sure that the recording is clear, all participants have had their microphones placed on mute.

- There will be a question and answer session at the end of the session. I would like to invite you to submit comments and questions during the webinar through the chat box. Please look at the Q&A chat box on your screen. If you think of a question for the speakers at any point, open the chat box, select my name and send the question in. If we are not able to address all the questions during the Q&A period, the speakers have graciously agreed to provide a written response that we will include with the recording of the webinar.

Best Practices for Community-Engaged Research for Environmental Health

- **February 9 – Community Engagement & Environmental Health in Louisiana**
 - **Jennifer Abraham Cramer:** *"Women Pioneers of the Louisiana Environmental Movement: Oral History as a Valuable Qualitative Research Method"*
 - **Wilma Subra:** *"Educating and Empowering Communities to Reduce Negative Health Impacts Associated with Environmental Pollution"*
 - **Jennifer Irving:** *Question & Answer Session*
- **March 9 – Community-Engaged Research: Methods and Applications**
- **April 13 – Resources for Communities**

PRESS RECORD

With the housekeeping out of the way, I'd like to thank you all again for attending today's webinar. This is the first webinar in the LSU Superfund Research Center's Community-Engaged Webinar Series ---Best practices for Community -Engaged Research for Environmental Health

Today's webinar will start with a presentation from Jennifer Abraham Cramer followed by our keynote speaker Wilma Subra. At the end there will be a combined question and answer session.

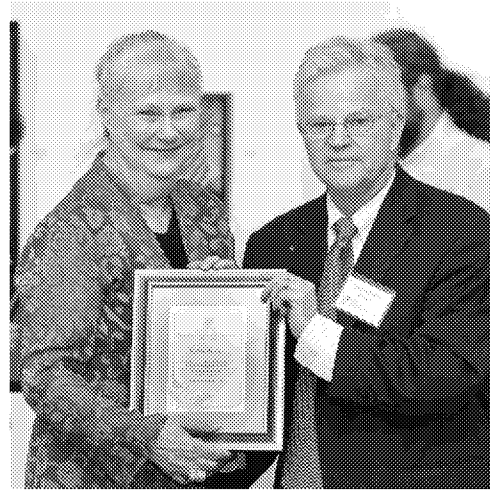
Advance slide – with that, I'd like to introduce our first speaker....

*"Women Pioneers of the
Louisiana Environmental
Movement: Oral History as
a Valuable Qualitative
Research Method"*



Jennifer Abraham Cramer is the Director of the T. Harry Williams Center for Oral History. She oversees oral history projects for the LSU Libraries and manages an oral history collection of over 6,000 interviews with topics on Louisiana politics, culture, military, the environmental movement, civil rights, women's history, and coastal changes. Cramer served as the Media Review Editor for *The Oral History Review* from 2010-2018.

"Educating and Empowering
Communities to Reduce
Negative Health Impacts
Associated with Environmental
Pollution"



Wilma Subra pictured with former
Louisiana Governor Buddy Romer.
Photo used with permission from LEAN
and Jeffery Dubinsky.

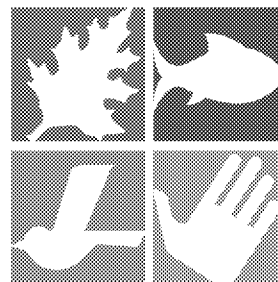
Thank Jennifer for that wonderful presentation. If those of you in the audience have questions, please remember to submit them to me through the chat box. I'd like to introduce our next speaker....

Wilma Subra founded the Subra Company in 1981 and is the Technical Advisor for the Louisiana Environmental Action Network (LEAN). She provides technical assistance to citizens across the United States and foreign countries concerned with their environmental health. Subra is the recipient of the MacArthur "Genius" Award, was named the "People's Scientist" by Discover Magazine, and completed a six-year term as a member of the EPA National Environmental Justice Advisory Council.

Educating and Empowering
Community Members to
Reduce the Negative
Health Impacts Associated
With Environmental Pollution

By Wilma Subra

Louisiana Environmental Action Network



LSU | Superfund Research Center

Advancing Science, Promoting Health

Community member concerns:

- Environmental pollution
- Negative health impacts experienced by:
 - Children
 - Grandchildren
 - Spouses
 - Parents
 - Grandparents



Add project 3



Health Impacts

Most prevalent health impacts of environmental pollution:

- Asthma attacks
- Respiratory problems
- Headaches
- Skin rashes
- Leukemia
- Brain cancers
- Breast Cancer
- Neuroblastoma
- Angiosarcoma of the liver
- Anencephaly – baby born without parts of their brain
- Lung cancer
- Liver cancer
- Birth Defects

Redo layout to use 2 columns and make text bigger



**What do
community
members
want to
know?**

Community members want to know:

- What pollution (chemical or biological) could be causing the health impacts?
- Where are pollutants coming from?
- Which facilities are releasing the pollutants?
- What are the pathways of exposure?

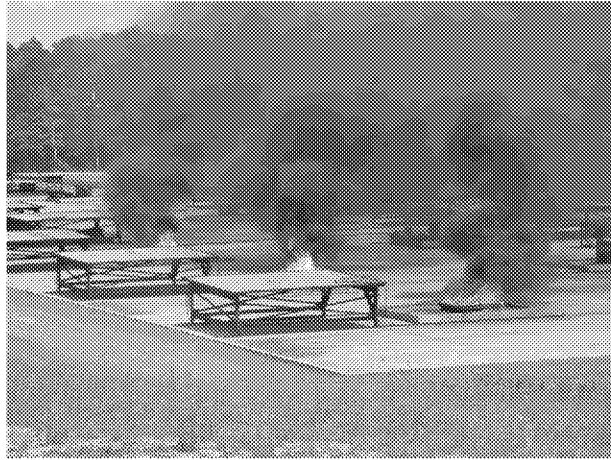
And in today's environment:

- Who did you come in contact with that was positive for COVID-19?

Sources of Pollutants

Potential sources of pollutants:

- Air emissions
- Drinking water
- Contaminated soil
- Surface water – lakes, rivers, streams
- Groundwater
- Contaminated food
- Contaminated seafood
- Sewer plants
- Industrial facilities
- Landfills
- Waste sites



*Aerial photo of open burning at Clean Harbors.
Photo credit: Minden Press-Herald April 6, 2017*

Bigger text

Replace this figure – don't want Brenda to get in trouble for this aerial picture if Clean Harbors gets wind of it.

Working with Community Members

Community members reach out for help to understand:

- What is going on in our communities
- How to address and lessen negative health impacts
- How to reduce exposure



My work has been described as "helping ordinary citizens understand, cope with and combat environmental issues in their communities."

Ways to Help the Community



1. Evaluate the environmental and social situations.
2. Research local zoning situations and compliance with zoning requirements.
3. Research history of environmental permitting processes, inspections and history of compliance orders for facilities in and around target area.
4. Check out old industrial facilities and dump sites as potential sources of contamination.

Feedback welcome! Fantastic list, but there are too many items to read. Pick the four main ones and keep to one slide. You can say a few others without having them listed on the slide.

Ways to Help the Community



5. Provide community members with handouts of all the data.
6. Engage the assistance of educators, university professors and students to assist and participate in the educational components and research needed by community members.
7. When an emergency situation occurs or new critical data is released, immediately hold a community meeting to educate community members on the situation.

Feedback welcome! Fantastic list, but there are too many items to read. Pick the four main ones and keep to one slide. You can say a few others without having them listed on the slide.

Ways to Help the Community



Once community members **become educated** and **involve the larger community population**, together they can use the information as a basis to **request appropriate authorities to take action** that can help reduce chemical or biological exposure.

Feedback welcome! Fantastic list, but there are too many items to read. Pick the four main ones and keep to one slide. You can say a few others without having them listed on the slide.

Central Louisiana Coalition for a Clean and Healthy Environment Colfax, Louisiana

- Clean Harbors Colfax is an open burns/open detonation hazardous waste thermal treatment facility
- Causes negative health and quality of life impacts to community members



Open burning of hazardous and explosive materials near Colfax. Photo provided by LEAN

Cut the text down to basic points, then include the timeline slide

Central Louisiana Coalition for a Clean and Healthy Environment Colfax, Louisiana

- Community involvement:
 - Just under 50 community members submitted as many as 365 complaints to the LDEQ over one year
 - Community member complaints have occurred from before September 2017 to present.
- LDEQ began obtaining burn logs for each burn event on the dates of community complaints
 - Now, records of waste burning are provided to the community if there is a complaint



Open burning of hazardous and explosive materials near Colfax. Photo provided by LEAN

Cut the text down to basic points, then include the timeline slide

Central Louisiana Coalition for a Clean and Healthy Environment Colfax, Louisiana

- In response:
 - LDEQ has documented a large number of permit violations
 - Multi-Media Inspection in October 2016
 - Issued many Consolidated Compliance Orders and Notices of Potential Penalties through 2020
- 2019 Hazardous Waste Disposal Report for Clean Harbors Colfax:
 - Received hazardous waste from 331 generators
 - From 46 states and Puerto Rico
 - 292,318 pounds net weight of explosive waste

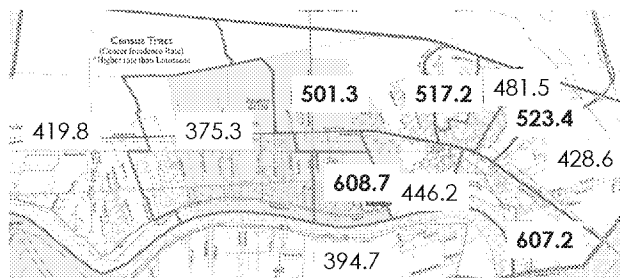


Open burning of hazardous and explosive materials near Colfax. Photo provided by LEAN

2014 National Air Toxics Assessment

Released August 22, 2018

- Louisiana has 13 facilities that release air emissions of Ethylene Oxide
- Number two ranking air emission facility: Union Carbide/Dow facility in Hahnville, LA
- LA has 11 facilities releasing Ethylene Oxide along the Mississippi River in what is known as Cancer Alley:
 - Ascension Parish (3 facilities)
 - 6 in Iberville Parish (6 facilities)
 - 1 in St. John the Baptist Parish (1 facility)
 - 1 in St. Charles Parish (Union Carbide/Dow)
- Withing five days of the EPA NATA release, I held the first of a number of workshops
 - Reserve, St. John the Baptist Parish
 - Followed by other parishes where facilities releasing Ethylene Oxide were located.



Census tract map of St. John the Baptist parish with ethylene oxide cancer risk

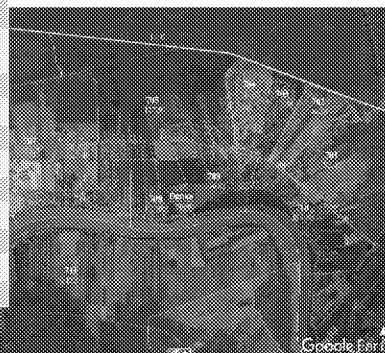
Consolidate 2 NATA slides onto one slide with less text, put the cancer table in bigger text

2014 National Air Toxics Assessment

Released August 22, 2018

- March 31, 2020: the EPA's Inspector General issued a Management Alert
 - Improve risk communication in communities where cancer risks are potentially elevated due to ethylene oxide air emissions
- January 14, 2021: EPA Administrator Andrew Wheeler rejected these urgent recommendations
- August 2018: I began conducting workshops in LA communities where facilities release ethylene oxide
 - I continue to hold these workshops

Census Tract	Cancer Risk per 1,000,000
708 (includes most of Denka)	1279.5
709 (includes part of Denka)	336.0
705	127.9
706	37.85
707	221.3
710	134.9
711	142.5
701	55.45
702	46.16
703	70.40
704	70.65



Public domain map created using Google Earth. Data for this map is derived from the 2014 National Air Toxics Assessment. Data for this map is derived from the 2014 National Air Toxics Assessment. Data for this map is derived from the 2014 National Air Toxics Assessment.

Census tract map of St. John the Baptist parish with ethylene oxide cancer risk

Denka Performance Elastomer, Formerly DuPont Pontchartrain Works, LaPlace

- In December 2015, the National Air toxics assessment (NATA) classified chloroprene as a likely human carcinogen
 - The long-term cancer-based comparison level for a 100 in 1 million cancer risk comparison 0.2 $\mu\text{g}/\text{m}^3$ for chloroprene.
- Census tract where Denka is mostly located has a cancer risk of 776.8 per 1M
 - Highest risk in the U.S.
 - Census tract in which Denka is partly located has a cancer risk of 426.6 per 1M
- NATA estimated higher than expected levels of chloroprene in LaPlace
- **EPA identified the Dupont/Denka facility as creating the greatest offsite risk of cancer of any manufacturing facility in the US**

Cut down text and make data more prominent

Biomonitoring for Chloroprene

- Urine Biomonitoring conducted on members of the Reserve/LaPlace community
- All individuals tested had the metabolites of chloroprene in their urine
- This indicates exposure to airborne chloroprene released by Denka

Good info, but put into bullets.

Denka Performance Elastomer, Formerly DuPont Pontchartrain Works, LaPlace

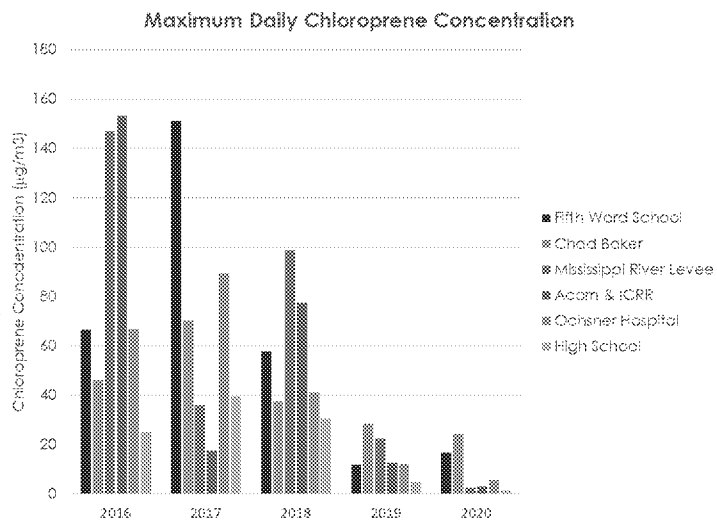
- I conducted workshops in Reserve twice a month to keep the community members informed on the quickly and critically developments associated with their exposure to chloroprene.
 - Once per month by end of 2019
 - Additional workshops when critical events and information was released.
 - Since the pandemic, community meetings conducted virtually, with handouts provided
- January 6, 2017: LDEQ issued an Administrative Order on Consent to Denka
 - Required the facility to install four air emission control technologies to reduce the chloroprene air emissions by 85% based on the 2014 air emission

Consider making a timeline or cutting down text to main bullets

EPA Air Monitoring Around the Denka Facility

May 25, 2016 – Sept. 26, 2020

- EPA monitored for chloroprene at six locations around the Denka facility
- New chloroprene control technologies resulted in reduced emissions and ambient air concentrations
- However, maximum concentrations continue to exceed $0.2 \mu\text{g}/\text{m}^3$ at all locations
- Maximum chloroprene concentration at the Fifth Ward Elementary School of $15.2 \mu\text{g}/\text{m}^3$ in 2020 was still **over 75 times** cancer risk level of $0.2 \mu\text{g}/\text{m}^3$



Turn data into a graph, combine slides 17, 18, and 19

Mississippi River Industrial Corridor Parishes in the Top 50 Counties in the United States Based on Deaths Caused by Coronavirus

Medical conditions that increase individual vulnerability to severe illness and death due to COVID-19:

Condition	Prevalence in COVID-19 Cases with Severe Illness or Death
Hypertension	65.5%
Diabetes	38.6%
Neurological Disease	27.7%
Cardiac Disease	27.6%
Chronic Kidney Disease	22.2%
Obesity	21.6%
Congestive Heart Failure	16.9%
Pulmonary Disease	14.2%
Cancer	9.2%
Asthma	4.1%

Mississippi River Industrial Corridor Parishes in the Top 50 Counties in the United States Based on Deaths Caused by Coronavirus

- Only 5% of COVID-19 fatality victims had no pre-existing health conditions
- Many pre-existing health conditions associated with exposure to toxic air emissions released by industrial facilities along Cancer Alley and in other industrial areas of Louisiana

Educating and empowering community members to reduce negative health impacts of environmental pollution is critical to:

- Protect and improve quality of life
- Lessen risk of exposure to toxic chemicals in the environment in which each of us live



Questions?



Wilma Subra



Jennifer Abraham
Cramer



Jennifer Irving

Thank You!

- To our speakers
 - Jennifer Abraham Cramer
 - Wilma Subra
- To the organizing committee
 - Dr. Margaret Reams &
 - Dr. Jennifer Richmond-Bryant
- Vy Truong
- Holly Carruth



<https://www.lsu.edu/srp/news/2021/webinar-series.php>

Before I end the webinar I would like to take a moment to thank our speakers for their wonderful presentations. Please join me in giving them a virtual round of applause!

I would also like to thank my colleagues in the LSU Superfund Research Center's Community Engagement Core – Dr. Margaret Reams and Dr. Jennifer Richmond-Bryant for their help organizing this webinar series.

Vy Truong is an undergraduate research assistant with the Community Engagement Core and helped us prepare the promotional materials for this webinar

And Holly Carruth with LSU's Office of Research and Economic Development for her help with logistics.

Finally, please note the url for the seminar series. Everyone that registered will receive an email when the recording of the webinar is available and that information will also make its way to our website.

Thank you everyone and I hope to see you at our next webinar on March 9th.